List of Contents

NUMBER 1

Q. Z. Xiao, B. L. Karihaloo and **F. W. Williams**	1	Application of penalty-equilibrium hybrid stress element method to crack problems
Toshiyuki Meshii and **Katsuhiko Watanabe**	23	Maximum stress intensity factor for a circumferential crack in a finite-length thin-walled cylinder under transient radial temperature distribution
N. Merah, T. Bui-Quoc and **M. Bernard**	39	Creep–fatigue crack growth in notched SS-304 plates at 600°C
L. C. A. Folch and **F. M. Burdekin**	57	Application of coupled brittle–ductile model to study correlation between Charpy energy and fracture toughness values
Arcady V. Dyskin, Leonid N. Germanovich and **Konstantin B. Ustinov**	81	A 3-D model of wing crack growth and interaction
Wang Qi-Zhi and **Chen Jinqiu**	111	Erratum
	113	Calendar

NUMBER 2

Z. K. Guo, A. S. Kobayashi, J. C. Hay and **K. W. White**	115	Fracture process zone modeling of monolithic Al2O3
M. H. Sharobeam and **J. D. Landes**	131	Numerical solutions for ductile fracture behavior of semi-elliptical surface crack
Ya-Jun Guo and **Xue-Ren Wu**	147	Bridging stress distribution in center-cracked fiber reinforced metal laminates: modeling and experiment
Ripudaman Singh, S. K. Patel and **B. Dattaguru**	165	Decomposed crack closure integrals for estimation of SIF variations
Xi-Qiao Feng and **Dietmar Gross**	179	A global/local shakedown analysis method of elasto-plastic cracked structures
Weili Cheng	193	Determination of the mode I stress intensity factors for an edge-cracked beam with fixed ends
S. A. Fawaz	209	Stress intensity factor solutions for part-elliptical through cracks
	227	Calendar

NUMBER 3

J. Z. Zhang, M. D. Halliday, P. Bowen and **P. Poole**	229	Three dimensional elastic-plastic finite element modelling of small fatigue crack growth under a single tensile overload
Tohru Takamatsu, Takashi Matsumura, Norio Ogura, Toshiyuki Shimokawa and **Yoshiaki Kakuta**	253	Fatigue crack growth properties of a GLARE3-5/4 fiber/metal laminate
P. Chevrier and **J. R. Klepaczko**	273	Spall fracture: Mechanical and microstructural aspects
P. S. Song and **C. C. Wen**	295	Crack closure and crack growth behaviour in shot peened fatigued specimen
J. J. Schubbe and **S. Mall**	305	Investigation of a cracked thick aluminum panel repaired with a bonded composite patch
I. S. Jones	325	The application of a displacement controlled weight function for a single edge cracked plate to thermal fatigue damage assessment
	345	Calendar

NUMBER 4

A. S. Gullerud, R. H. Dodds Jr., R. W. Hampton and **D. S. Dawicke**	347	Three-dimensional modeling of ductile crack growth in thin sheet metals: computational aspects and validation
M. Yngvesson and **F. Nilsson**	375	Fatigue crack growth of surface cracks under non-symmetric loading
L. L. Mishnaevsky Jr, N. Lippmann, S. Schmauder and **P. Gumbsch**	395	In-situ observation of damage evolution and fracture in AlSi7Mg0.3 cast alloys
Y. Liu, L. H. Liang, Q. C. Hong and **H. Antes**	413	Non-linear surface crack analysis by three dimensional boundary element with mixed boundary conditions
T. D. Chaudhari and **S. K. Maiti**	425	Modelling of transverse vibration of beam of linearly variable depth with edge crack
Mohamed El-Shennawy, Fumiyoshi Minami, Masao Toyoda and **Katsuya Kajimoto**	447	Crack-tip plastic constraint activators and the application to plane-strain fracture toughness test: Proposal on small-size fracture toughness specimen

M. Beghini, L. Bertini and **V. Fontanari** 481 Erratum to "Stress intensity factors for an inclined edge crack in a semiplane"

483 Calendar

NUMBER 5

I. V. Orynyak 485 'Leak' scenario in limit load estimate for a pressurized thin-walled branch pipe with an axial crack

X. B. Lin and **R. A. Smith** 503 Finite element modelling of fatigue crack growth of surface cracked plates Part I: The numerical technique

X. B. Lin and **R. A Smith** 523 Finite element modelling of fatigue crack growth of surface cracked plates Part II: Crack shape change

X. B. Lin and **R. A. Smith** 541 Finite element modelling of fatigue crack growth of surface cracked plates Part III: Stress intensity factor and fatigue crack growth life

Xiulin Zheng and **Rong Wang** 557 Overload effects on corrosion fatigue crack initiation life and life prediction of aluminum notched elements under variable amplitude loading

G. P. Nikishkov, J. Heerens and **K.-H. Schwalbe** 573 Transformation of CTOD δ_5 to CTOD δ_{BS} and J-integral for 3PB- and CT-specimens

Tianzhi Chen, Bo Wang, Zhangzhi Cen and **Zhishen Wu** 591 A symmetric Galerkin multi-zone boundary element method for cohesive crack growth

Michael C. Larson, Melody Arthur Verges and **William D. Keat** 611 Nondestructive identification of three-dimensional embedded cracks in finite bodies by inversion of surface displacements

Niell Elvin and **Christopher Leung** 631 A fast iterative boundary element method for solving closed crack problems

649 Calendar

NUMBER 6

Ø. Ranestad, Z. L. Zhang and **C. Thaulow** 653 An engineering method for constraint based fracture assessment of welded structural components with surface cracks

J. A. Bea, M. Doblaré and **L. Gracia** 675 Evaluation of the probability distribution of crack propagation life in metal fatigue by means of probabilistic finite element method and B-models

A. P. Cisilino and **M. H. Aliabadi** 713 Three-dimensional boundary element analysis of fatigue crack growth in linear and non-linear fracture problems

Chunyu Li, Zhenzhu Zou and **Zhuping Duan** 735 Stress intensity factors for functionally graded solid cylinders

M. J. Pavier, C. G. C. Poussard and **D. J. Smith** 751 Effect of residual stress around cold worked holes on fracture under superimposed mechanical load

Jin-Quan Xu, Yi-Hua Liu and **Xiao-Gui Wang** 775 Numerical methods for the determination of multiple stress singularities and related stress intensity coefficients

791 Calendar

III Contents of Volume 63

VII Author Index